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10/823,973

04/14/2004

James J. Gibbons JR.

AM-101323USA

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06/22/2006

HOWSON AND HOWSON

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EXAMINER

FETTEROLF, BRANDON J

ART UNIT

PAPER NUMBER

1642

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,973

Applicant(s)

GIBBONS ET AL.

Examiner

Brandon J. Fetterolf, PhD

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 3-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Species Election***

During a telephone conversation with Cathy Kodroff on June 1, 2006 a provisional species election was made of renal cancer. Affirmation of this election must be made by applicant in replying to this Office action. As such, the non-elected species recited in claims 3-24 have been withdrawn from consideration by the examiner. However, upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Therefore, Claims 1-2 and 25-30 are currently under consideration.

### ***Information Disclosure Statement***

The Information Disclosure Statements filed on 7/13/2004 and 11/18/2004 are acknowledged. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner. A signed copy of the IDS is attached hereto.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 25-26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muss et al. (J. Clinical Oncology 1987; 5: 286-291) in view of Raymond et al. (Proceedings of ASCO 2000; 19: 187a, IDS).

Muss et al. teach a method of treating renal cell carcinoma comprising administering a therapeutically effective amount of interferon alpha (Title and page 287, 1<sup>st</sup> column, *IFN Preparation and Study Design*). Specifically, the reference teaches a modest but definite antitumor effect of interferon alpha in advanced renal cell carcinoma.

Muss et al. do not explicitly teach the combination of CCI-779 and interferon alpha for the treatment of renal cell carcinoma or a pharmaceutical pack/composition comprising CCI-779 and interferon alpha.

Raymond et al. teach the antitumor effect of the Rapamycin analog, CCI-779. Specifically, the reference teaches a method of treating renal carcinoma comprising administering CCI-779 to a patient (2<sup>nd</sup> column, abstract 728, 7<sup>th</sup> line from bottom).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references so as to treat renal cell carcinoma because each of the therapeutics had been individually taught in the prior art to be successful at treating renal cell carcinoma. The instant situation is amenable to the type of analysis set forth in In re Kerkhoven, 205 USPQ 1069 (CCPA 1980) wherein the court held that it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to for a third composition that is to be used for the very same purpose since the idea of combining them flows logically from their having been individually taught in the prior art. Applying the same logic to the instant claims, one of ordinary skill in the art would have reasonable expectation of success that by administering a combination of interferon alpha and CCI-779 to a patient suffering from renal cell carcinoma, one would achieve a method of treating renal cell carcinoma in a patient in need thereof.

Secondly, the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established

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scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

Claims 27 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurent et al. (European J. Cancer 1994; 30A: 1859-1865) in view of Beuvink et al. (Proc. Am. Assoc. Cancer Res. 2001; 42: 366 (abstract 1972)).

Laurent et al. teach the antitumor effects of interferon alpha as a single agent and in combination with 5'-deoxy-5-fluorouridine on xenograft tumors. Specifically, the reference teaches that administration of interferon alpha alone significantly inhibited tumor growth (abs). Moreover, Laurent et al. teach that the combination of interferon alpha and 5'-deoxy-5-fluorouridine resulted in an enhanced antitumor activity (Abs).

Laurent et al. do not explicitly teach the combination of RAD001, e.g., 42-O-(2-hydroxy)ethyl rapamycin, and interferon alpha for the treatment of xenograft tumors or a pharmaceutical composition comprising interferon alpha and RAD001, e.g., 42-O-(2-hydroxy)ethyl rapamycin.

Beuvink et al. teach a method inhibiting the growth of human tumor xenografts in nude mice comprising administering a therapeutically effective amount of RAD001, e.g., 42-O-(2-hydroxy)ethyl rapamycin.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references so as to treat xenograft tumors because each of the therapeutics had been individually taught in the prior art to be successful at inhibiting the growth of xenograft tumors. The instant situation is amenable to the type of analysis set forth in In re Kerkhoven, 205 USPQ 1069 (CCPA 1980) wherein the court held that it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose since the idea of combining them flows logically from their having been individually taught in the prior art. Applying the same logic to the instant claims, one of ordinary skill in the art would have reasonable expectation of success that by administering a combination of interferon alpha and RAD001, e.g., 42-O-(2-hydroxy)ethyl rapamycin, one would achieve a successful method of inhibiting the growth of xenografted tumors.

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Secondly, the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

Therefore, No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Fetterolf, PhD whose telephone number is (571)-272-2919. The examiner can normally be reached on Monday through Friday from 7:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brandon J Fetterolf, PhD  
Examiner  
Art Unit 1642

BF  
June 7, 2006

  
JEFFREY SIEW  
SUPERVISORY PATENT EXAMINER